### INTERNATIONAL MARITIME ORGANIZATION

4 ALBERT EMBANKMENT LONDON SE1 7SR

Fax:

Telephone: 0171-735 7611 0171-587 3210

Telex:

23588 IMOLDN G

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# **GUIDELINES FOR USE IN EVALUATING REGIONAL** MOBILE SATELLITE SYSTEMS

- The Sub-Committee on Radiocommunications, at its fortieth session (16 to 20 January 1995), noted that the International Convention for the Safety of Life at Sea (SOLAS), 1974, does not prevent the use, by any ship, survival craft or person in distress, of any means at their disposal to attract attention. make known their position and obtain help. The Sub-Committee agreed that, for the above purpose, the use of equipment operating in regional mobile satellite systems may be considered. However, Governments should ensure that equipment operating in radiocommunication services required by SOLAS chapter IV to be used in the Global Maritime Distress and Safety System (GMDSS), is provided on ships subject to the SOLAS Convention, and on other ships wishing to participate in the GMDSS, both to enhance the safety of the ships concerned and to enable them to receive distress alerts and communicate with other ships, survival craft and persons in distress.
- To assist Administrations in evaluating regional mobile satellite systems, which may be used for maritime distress and safety radiocommunication purposes, the Sub-Committee developed the Guidelines annexed hereto.

### ANNEX

# GUIDELINES FOR ADMINISTRATIONS IN THE EVALUATION OF REGIONAL MOBILE SATELLITE SYSTEMS

### 1 INTRODUCTION

1.1 Some regional mobile satellite systems may offer facilities for maritime distress and safety communications. Careful consideration is needed when evaluating these systems for this purpose.

#### 2 **DEFINITIONS**

- 2.1 "GMDSS Radio Systems" means the radio systems forming part of the Global Maritime Distress and Safety System (GMDSS) are those set out in chapter IV, regulation 5 of the International Convention for the Safety of Life at Sea (SOLAS 74), 1974, as amended in 1988.
- 2.2 "Regional Mobile Satellite System" means a satellite system providing a service to a limited area or region.
- 3 CONSIDERATIONS IN EVALUATING REGIONAL SATELLITE SYSTEMS FOR MARITIME DISTRESS AND SAFETY COMMUNICATIONS
- 3.1 The responsibility for evaluating regional mobile satellite systems to provide maritime distress and safety communications rests with the Administration concerned. This evaluation should be based on a thorough testing of the system.
- 3.2 In this evaluation, Administrations should take account of all the principles laid down by the Organization. In addition, regional mobile satellite systems should operate in accordance with the provisions of the ITU Radio Regulations and fulfil the technical and operational requirements of the Organization, including priority arrangements for maritime distress and safety radiocommunications,
- 3.3 The Administration should consider the need of preserving the safety for all ships, including those not equipped for the regional mobile satellite system. In this regard, it should be noted that mobile satellite systems can only perform some of the GMDSS radiocommunication functions, see also paragraph 3.9.
- 3.4 Ship earth stations operating in regional mobile satellite systems should conform to performance standards not inferior to those adopted by the Organization.
- 3.5 The Administrations should ensure that users are fully aware of the capabilities and limitations of regional mobile satellite systems.
- 3.6 The need of preserving the global uniformity of the radiocommunication processes within the GMDSS framework and the importance of efficient, unambiguous and fast ship-to-shore, shore-to-ship and ship-to-ship distress and safety communication processes must be borne in mind when evaluating regional mobile satellite systems.
- 3.7 The Administration should ensure that a current database of mobile earth station identities for ships using regional mobile satellite systems is made available to rescue co-ordination centres (RCCs).

- 3.8 Regardless of the use made of regional mobile satellite systems, the Administration should ensure that all relevant information concerning distress alerts, distress communications, search and rescue communications and maritime safety information is immediately transmitted to other ships via the appropriate GMDSS radio systems.
- Regional mobile satellite systems cannot perform the functional requirments set out in regulations 4.1.3, 4.1.5, 4.1.6, and 4.1.9 of chapter IV of SOLAS 74, as amended in 1988; see Appendix.
- 3.10 An Administration permitting use of such regional mobile satellite systems on board their ships should ensure that these ships are fully equipped for all GMDSS functions.
- 3.11 All ships fitted with a mobile earth station operating in a regional mobile satellite system should be provided with adequate documentation stating clearly the service area of the system and listing the equipment installed.
- 3.12 The Administration should ensure that the radio personnel of such ships are:
  - .1 educated in the use of the mobile earth station for distress and safety purposes and certified to that effect; and
  - .2 instructed on the importance of using the radiocommunication functions of the GMDSS, especially the ship-to-ship distress and safety functions, as these functions are not covered by regional mobile satellite systems; see Appendix.
- 3.13 Ships fitted for the GMDSS in accordance with the relevant provisions of chapter IV of SOLAS 74 Convention, as amended in 1988, are not required to be fitted with equipment for regional mobile satellite systems.

## **APPENDIX**

GMDSS function	Remarks
Ship-to-shore alert	See Note 1
Shore-to-ship alert	See Note 2
Ship-to-ship alerting	Regional mobile satellite systems cannot substitute the relevant GMDSS radio system
SAR communication ship-to-shore	See Note 1
SAR communication shore-to-ship	See Note 2
On-scene communication	Regional mobile satellite systems cannot substitute the relevant GMDSS radio system
Ship transmit locating signal	Regional mobile satellite systems cannot substitute the relevant GMDSS radio system
Ship receive locating signal	As above
Ship transmit MSI to shore	See Note 1
Ship receive MSI from shore	See Note 2
Ship-to-ship MSI	Regional mobile satellite systems cannot substitute the relevant GMDSS radio system
General com. ship-to-shore	Regional mobile satellite systems may be used
General com. shore-to-ship	Regional mobile satellite systems may be used
General com. ship-to-ship	Regional mobile satellite systems may be used between ships fitted for that system
Bridge-to-bridge com.	Regional mobile satellite systems cannot substitute the relevant GMDSS radio system
Note 1. Regional mobile satellite systems ma	w be used for this purpose provided that the responsible share authority

- Note 1. Regional mobile satellite systems may be used for this purpose, provided that the responsible shore authority immediately relay the same or all relevant information to other ships in the area via the relevant GMDSS radio system(s).
- Note 2. Regional mobile satellite systems may be used for this purpose, provided that the same or all relevant information is also transmitted immediately to other ships in the area via the relevant GMDSS radio system(s).